

# SC WaterWays

answering today's water resource challenges for future generations

## Resident Canada Geese: Concerns Along the Waterfront

Nell Orscheln, Clemson Extension Service and Katie Giacalone, Clemson Carolina Clear  
Part One of a two-part series on resident Canada geese.

April 2013

### The Resident Canada Goose

Canada geese prefer many of same landscape features that we do: open, grassy areas near water, including residential stormwater ponds, lakes, rivers, and streams. Most South Carolinians are accustomed to sharing their open spaces with a small population of resident and migrating geese.

The current population of resident Canada geese in the United States is estimated at seven million. With access to open water and little threat from predators, Canada goose populations can increase quickly, growing at a rate of 10-17% each year. If not effectively managed, this population growth is potentially harmful to human health and the environment.

Each Canada goose produces up to two pounds of waste every day! This waste contains fecal coliform bacteria and when it gets picked up by rainwater, it runs into storm drains, ditches, rivers, and lakes where it contaminates our recreational and drinking waters.

Excessive bacteria in our waterways can also impact human health and cause economic consequences, closing shellfish harvesting beds and beaches. Geese also overgraze grasses leaving the land with a bare appearance and soil vulnerable to erosion. Excessive droppings on park trails and in open spaces is also a deterrent to that space's use by families and can quickly become a maintenance issue.

Rapid crowding of geese can also cause a safety hazard to humans, impede pathways for aircraft, and increase susceptibility to diseases for other local waterfowl.

As far as research can show, there are no distinguishable genetic differences between residential and migrating Canada geese. There are also no distinguishing markings.



### Geese by the numbers

- One goose produces one to two pounds of waste every day.
- Droppings from one Canada goose contain 25 times the amount of fecal bacteria as human waste.
- "Gaggles" or flocks can contain up to 100 geese.
- A goose's lifespan can exceed 20 years.
- Geese populations can double every five years.



Diseases like duck plague, avian cholera, and avian botulism can kill large numbers of birds—not just geese.

South Carolina communities are showing an increasing interest in managing resident Canada geese. Available data overwhelmingly show that while resident Canada geese management can be a challenge, communities applying a comprehensive, multi-pronged approach to management can be successful. There is no one-size-fits-all approach, but there are several options to guide the development of a geese management strategy that is feasible and meets the needs of the individual community.

## Developing A Geese Management Strategy:

Before developing a management strategy, consider the following:

1. **PHYSICAL FACTORS:** Food, water, secure nesting, lack of predators, and suitable climate attract geese and keep them coming back
2. **CULTURAL FACTORS:** Existing human knowledge, attitude, and behaviors that may attract or protect geese
3. **REGULATORY FACTORS:** Laws and regulations (federal, state, local) that may alter geese management strategies

Available research emphasizes the importance of including the human dimension in any residential Canada geese management strategy. Many planned projects either never come to fruition or are unsuccessful due to lack of buy-in from stakeholders. Managers and planners should coordinate with stakeholders to develop a combination of long- and short-term strategies and invite the public and neighborhood to participate early on in the process. Further, it is essential to have continuing education opportunities built in to any management strategy and effective educational signage. State and federal biologists and agencies are available to assist.

## References:

Eastern Rhode Island Conservation District. Resident Canada Goose Fact Sheet. Retrieved February 20, 2013 from [http://www.easternriconservation.org/Goose\\_Fact\\_Sheet.pdf](http://www.easternriconservation.org/Goose_Fact_Sheet.pdf).

Smith, A. E., Craven, S. R., and Curtis, P. D. 1999. Managing Canada Geese in Urban Environments: A Technical Guide. Jack Berryman Institute Publication 16 and Cornell Cooperative Extension, Ithaca, NY.

US Environmental Protection Agency. 2001. Protocol for Developing Pathogen TMDLs. EPA 841-R-00-002. Washington, DC.

## Sources of Significant Content Guidance:

NJ Department of Environmental Protection Division of Watershed Management. 2001. Management of Canadian Geese in Suburban Areas: A Guide to the Basics. Ithaca, NY.

Smith, A. E., Craven, S. R., and Curtis, P. D. 1999. Managing Canada Geese in Urban Environments: A Technical Guide. Jack Berryman Institute Publication 16 and Cornell Cooperative Extension, Ithaca, NY.

## For More Information:

For more in-depth information, please refer to the Internet Center for Wildlife Damage Management ([www.icwdm.org](http://www.icwdm.org)).

Peer reviewed by Dr. Greg Yarrow, Clemson University, and Mr. Noel Myers, State Director of the SC USDA Wildlife Services Program. If you or your organization has any further questions about waterfowl management or other wildlife services, please contact the Wildlife Services Program at 1-803-786-9455 or 1-866-4USDAWS.

More information can be found in Part Two *H2O-014 Residential Canada Geese: Management Options*.



[www.clemson.edu/public/carolinaclear](http://www.clemson.edu/public/carolinaclear)

Carolina Clear is a program of Clemson University's Public Service Activities. Information is provided by Faculty and Cooperative Extension Agents. Clemson University Cooperative Extension Service offers its programs to people of all ages, regardless of race, color, sex, religion, national origin, disability, political beliefs, sexual orientation, marital or family status and is an equal opportunity employer.